



# The Future is Already Here: Connected and Autonomous Vehicles

## Status of Testing and Deployment of Automated Vehicles

Jack Hall  
Intelligent Transportation Systems  
Contra Costa Transportation Authority  
November 9, 2016

## Contra Costa County, California

**Location**

Eastern Suburb of the San Francisco Bay Area

**Population**

1 Million+

**Thriving Commerce**

Businesses headquartered in Contra Costa County include:

BevMo!

JOHN MUIR

**Diverse**

Demographically, economically and geographically

## Who We Are

- CCTA is a public agency formed by voters in 1988 to manage the county's transportation sales tax program and to lead transportation planning efforts.
- We are responsible for maintaining and improving the county's transportation system by delivering critical transportation infrastructure projects to safely and efficiently get people where they need to go.
- Managing entity of autonomous vehicle (AV) testing site: GoMentum Station.

## What We Do

**PEDESTRIAN**

Make improvements to sidewalks, crosswalks, trails, and paths

**BICYCLE**

Invest in safe routes and infrastructure improvements for bicyclists

**LOCAL STREETS**

Smooth traffic flow on major roads and invest in improvements such as repairing potholes and road surfaces

**BART**

Improve BART service and stations, extend routes and increase parking at stations

**BUSES**

Invest in a reliable, comfortable and convenient bus network

**HIGHWAYS**

Complete Contra Costa's highway system, and improve air quality and noise protection along these corridors

**SAFE ROUTES TO SCHOOLS**

Focus on programs and projects aimed at bicycle and pedestrian safety for K-12 students

**CARPPOOL/RIDESHARE**

Implement programs to reduce traffic congestion by encouraging carpooling and ridesharing

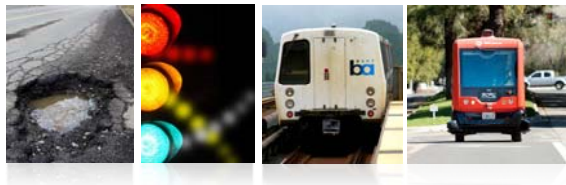
**FERRIES**

Expand the Bay Area ferry system by looking to ferries as an alternate commute method between West County and San Francisco

**PROGRAMS FOR SENIORS AND PEOPLE WITH DISABILITIES**

Enhance transit options to improve mobility for seniors and people with disabilities

## What We Heard



## Searched the World for the Perfect SAV





## The Future is Already Here: Connected and Autonomous Vehicles

### We've Celebrated Many "Firsts"



BILL  
1592



### Needed a Forklift to Uncrate Vehicle



### Safe Testing in Controlled Environment

**November 2016**

Testing @ GoMentum Station

**March 2017**

Testing @ Bishop Ranch



### Vehicle Storage



### Charging



### Parking Lot within Business Park



### Launch on Public Roads

**March 6, 2018**

First Test on Public Roads  
@ Bishop Ranch



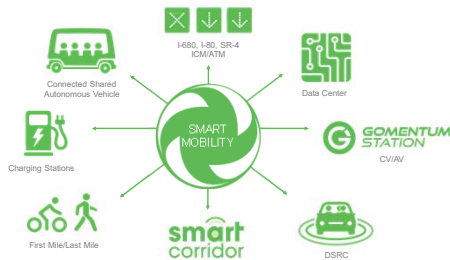


## The Future is Already Here: Connected and Autonomous Vehicles

### SAV Partners



### Smart Mobility



### Shuttle Service within Bishop Ranch



### Shuttle Service with Local Traffic



### Complement to Transit







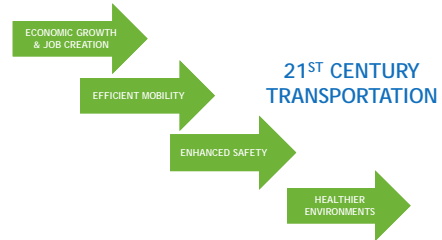
# The Future is Already Here: Connected and Autonomous Vehicles

## Phase III – Implementation

EasyMile SAV



## Redefining Mobility



## PAVED ROADS

- Over 20 miles of paved roadways including a 7-mile long spine road for high speed testing
- Additional roadway improvements based on Master Plan

## TUNNELS

Two 1400-ft. long tunnels ideal for testing guidance, sensors & communications technologies

## FREEWAY UNDERPASSES

Underpasses and variable roadway geometrics



## *The Future is Already Here: Connected and Autonomous Vehicles*

### PARKING LOTS

Several parking lots for testing by multiple users

### We Are a Global AVPG



GoMentum Station is an International Entity



### GoMentum Station is Multimodal Key AM Partners Testing at GoMentum Station



### HONDA Research Institute

